

**Appln No. 10/821,266**  
**Amdt date July 7, 2006**  
**Reply to Office action of April 10, 2006**

**Amendments to the Drawings:**

The attached sheet of drawing includes changes to Fig. 2. This sheet, which includes Fig. 2, replaces the original sheet including Fig. 2.

Attachment:            Replacement Sheet

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### REMARKS/ARGUMENTS

Claims 1-20, 36 and 38 are pending in this application with claims 21-25, 37, and 39-41 withdrawn pursuant to applicant's election of the Group I claims. In the Office action of April 10, 2006, the examiner raised a number of objections to the specification as filed. In particular, the examiner objected to the abstract and to the description of Figs. 8 and 9 in the "Brief Description of the Drawings," and pointed out an inconsistency in the reference numerals used to describe the "droplet" of Fig. 4. Applicant has amended the specification and believes that these objections have been overcome. Additionally, upon reviewing the drawing figures, applicant discovered certain typographical errors in Fig. 2. Therefore, a revised Fig. 2 is submitted with this response.

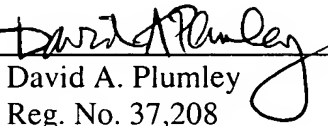
Turning to the substance of the Office action, the examiner has rejected claims 1-3, 5-10, 12-16, 18, 36, and 38 as anticipated by Mao et al. It is noted that Mao et al. disclose nanoparticles that are coated with a catalyst to promote the growth of carbon nanotubes. (See Mao et al., Abstract). However, according to each of independent claims 1 and 8, the claimed carbon-based composite material comprises "a carbon-based material which is *partially embedded* within the particle and which partially protrudes from the surface of the particle." (Emphasis added). Similarly, independent claim 14 recites "a material of a cylindrical shape which is *partially embedded* within the particle and which partially protrudes from the surface of the particle." (Emphasis added). While Mao et al. purport to teach that materials such as carbon nanotubes may be *grown on the surface of a particle*, Mao et al. completely fail to teach or suggest that either a carbon-based material or a material of a cylindrical shape is *partially embedded* within the particle. Consequently, Mao et al. fail to anticipate the subject matter of any of the independent claims. Accordingly, Mao et al. cannot anticipate nor make obvious the dependent claims. Therefore, each of the remaining claims, claims 2-7, 9-13, 15-20, 36, and 38 is allowable over the prior art.

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Turning to the examiner's rejection of claims 4, 11, and 17 as obvious over Mao et al., for the reasons set forth above, the examiner's rejection is moot. Finally, while the basis for the examiner's rejection of claims 19-20 is unclear from the Office action, whatever the reason for rejection, these claims are also allowable due to their dependency on allowable independent claim 1 for the reasons set forth above.

Claims 1-20, 36 and 38 remain in this application and applicant is of the opinion that all claims are allowable. However, if there are any remaining issues, the examiner is asked to contact applicant's counsel at the number below.

Respectfully submitted,  
CHRISTIE, PARKER & HALE, LLP

By   
David A. Plumley  
Reg. No. 37,208  
626/795-9900

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## APPENDIX